

# HILLSIDE SERVICE AREA (PWSNO 1280095) SOURCE WATER ASSESSMENT REPORT

---

July 31, 2001



## State of Idaho Department of Environmental Quality

**Disclaimer:** This publication has been developed as part of an informational service for the source water assessments of public water systems in Idaho and is based on the data available at the time and the professional judgement of the staff. Although reasonable efforts have been made to present accurate information, no guarantees, including expressed or implied warranties of any kind, are made with respect to this publication by the state of Idaho or any of its agencies, employees, or agents, who also assume no legal responsibility for the accuracy of presentations, comments, or other information in this publication. The assessment is subject to modification if new data is produced.

## Executive Summary

Under the Safe Drinking Water Act Amendments of 1996, all states are required by the U.S. Environmental Protection Agency to assess every source of public drinking water for its relative sensitivity to contaminants regulated by the act. This risk assessment is based on a land use inventory in the well recharge zone, sensitivity factors associated with how the well was constructed, and aquifer characteristics.

This report, *Source Water Assessment for Hillside Service Area*, describes the public drinking water wells; the well recharge zone and potential contaminant sites located inside the recharge zone boundaries. This assessment, taken into account with local knowledge and concerns, should be used as a planning tool to develop and implement appropriate protection measures for this public water system. **The results should not be used as an absolute measure of risk and they should not be used to undermine public confidence in the water system.**

Drinking water for the Hillside Service Area is supplied by two wells pumping from the Rathdrum Prairie Aquifer. The water system, owned by North Kootenai Water District, serves a population of about 2000 people in Hayden Lake, Idaho. Historically, Hillside Service Area water quality problems have been limited to sporadic instances of microbial contamination in the reservoir and distribution system. A groundwater Susceptibility Analysis conducted by DEQ June 6, 2001 found the wells to be at moderate risk of contamination, mostly because of natural factors associated with local geology.

This assessment should be used as a basis for determining appropriate new protection measures or re-evaluating existing protection efforts. No matter what ranking a source receives, protection is always important. Whether the source is currently located in a “pristine” area or an area with numerous industrial and/or agricultural land uses that require education and surveillance, the way to ensure good water quality in the future is to act now to protect valuable water supply resources.

In its own jurisdiction, Hillside Service Area should promote its cross connection control program. Visits to businesses in the recharge zone for the wells to encourage best management practices for preservation of ground water quality, and presentations before civic groups are examples of public education activities the water district may want to consider. Local participation in development of long term management and contingency plans for the recharge zone should be encouraged.

Because 186 public water systems in Idaho draw water from the Rathdrum Prairie Aquifer, they should consider forming a regional group to represent their interests before state, county and municipal governing bodies when regulatory tools like zoning overlays, or enactment of building codes are the most appropriate ground water protection measures. Partnerships with state and local agencies and industry groups should also be established.

Due to the time involved with the movement of ground water, source water protection activities should be aimed at long-term management strategies even though these strategies may not yield results in the near term. For assistance in developing protection strategies, please contact your regional Department of Environmental Quality office or the Idaho Rural Water Association.

# SOURCE WATER ASSESSMENT FOR HILLSIDE SERVICE AREA

## Section 1. Introduction - Basis for Assessment

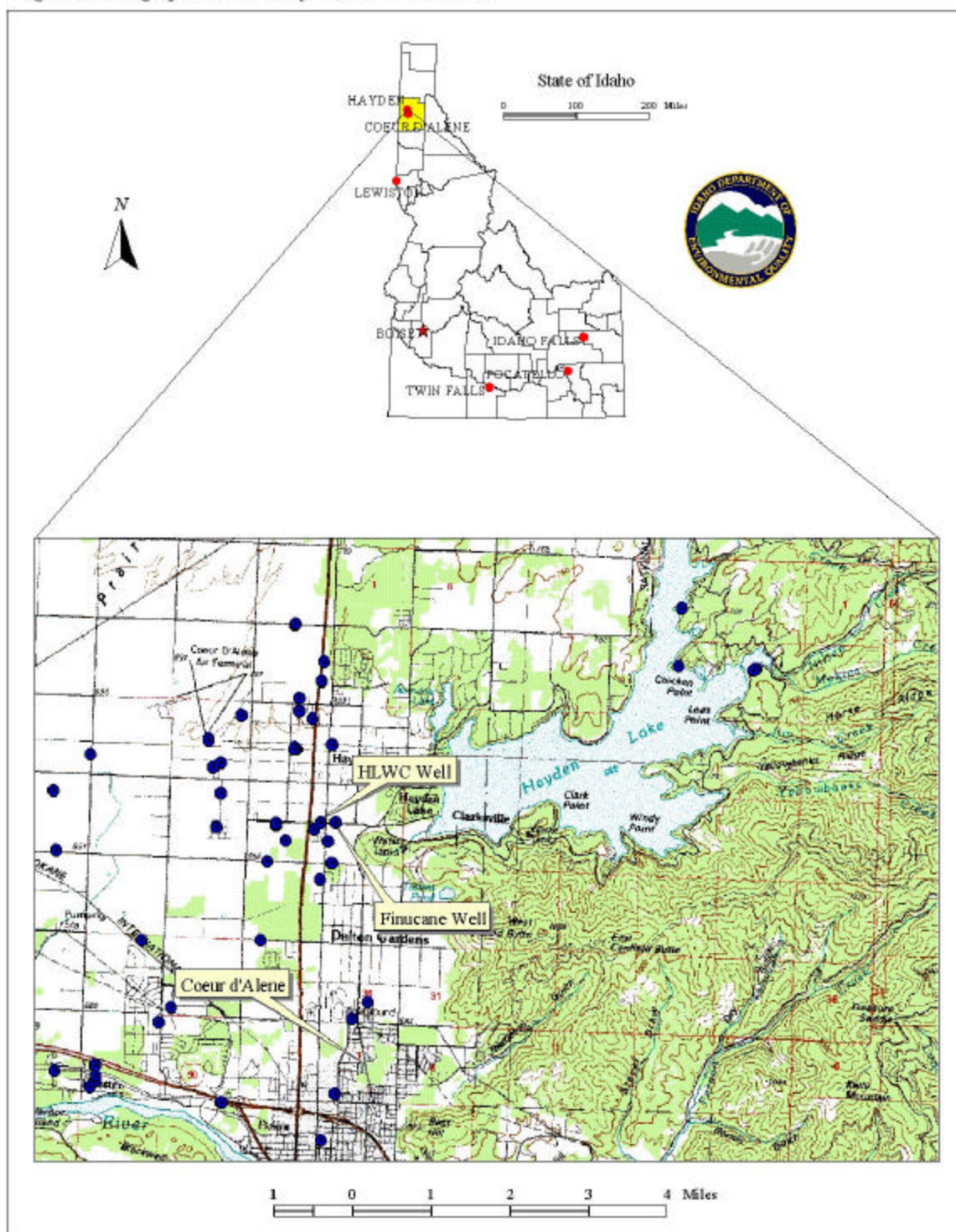
The following sections contain information necessary for understanding how and why this assessment was conducted. **It is important to review this information to understand what the ranking of this source means.** A map showing the delineated source water assessment area and an inventory of significant potential sources of contamination identified within that area are included. The ground water susceptibility analysis worksheets used to develop this assessment are attached.

### Level of Accuracy and Purpose of the Assessment

The Idaho Department of Environmental Quality (DEQ) is required by the U.S. Environmental Protection Agency (EPA) to assess every public drinking water source in Idaho for its relative susceptibility to contaminants regulated by the Safe Drinking Water Act. These assessments are based on a land use inventory inside the delineated recharge zones, sensitivity factors associated with how the well is constructed, and aquifer characteristics. The state must complete more than 2900 assessments by May of 2003. Because resources and the time available to accomplish assessments are limited, an in-depth, site-specific investigation for every public water system is not possible.

**The results of the source water assessment should not be used as an absolute measure of risk and they should not be used to undermine public confidence in the water system** The ultimate goal of this assessment is to provide data to local communities for developing a protection strategy for their drinking water supply. The Idaho Department of Environmental Quality recognizes that pollution prevention activities generally require less time and money to implement than treating a public water supply system once it has been contaminated. DEQ encourages communities to balance resource protection with economic growth and development. The decision as to the amount and types of information necessary to develop a source water protection program should be determined by the local community based on its own needs and limitations. Wellhead or source water protection is one facet of a comprehensive growth plan, and it can complement ongoing local planning efforts.

Figure 1. Geographic Location of Hillside Service Area



## Section 2. Preparing for the Assessment

### Defining the Zones of Contribution - Delineation

The delineation process establishes the physical area around a well that will become the focal point of the assessment. The process includes mapping the boundaries of the well recharge area into time of travel (TOT) zones indicating the number of years necessary for a particle of water to reach a well. DEQ used a refined computer model approved by the EPA to determine the time of travel for water pumped by public water systems from the Rathdrum Prairie Aquifer. The computer model used data assimilated by DEQ from a variety of sources including local well logs

Hillside Service Area serves a population of about 2000 people located in Hayden Lake, Idaho (Figure 1). Public drinking water for Hillside Service Area customers is supplied by the Hayden Lake Water Company (HLWC) Well and the Finucane Well.

The Hayden Lake Water Company Well, jointly owned and used by North Kootenai Water District and Honeysuckle Hills Homeowners Association, has a capacity of 1100 GPM. The HLWC delineation stretches in a narrow corridor from the well to the edge of the aquifer at Hayden Lake. The Finucane well capacity is 450 GPM. The delineation for the Finucane well also terminates at the edge of the aquifer. It runs parallel to the HLWC delineation and overlaps it slightly.

### Identifying Potential Sources of Contamination

The goal of the inventory process is to locate and describe those facilities, land uses, and environmental conditions that are potential sources of ground water contamination. Inventories for public water systems in Idaho were conducted in two-phases. The first phase involved identifying and documenting potential contaminant sources within the Hillside Service Area source water assessment areas through the use of computer databases and Geographic Information System maps developed by DEQ. The second, or enhanced, phase of the contaminant inventory involved contacting the operator to validate the sources identified in phase one and to add any additional potential sources in the area. This task was undertaken with the assistance of Richard Fairhurst.

Figure 2, *Hillside Service Area Delineation and Potential Contaminant Inventory* on page 7 of this report shows the locations of the Hillside Service Area wells, the zones of contribution DEQ delineated for the wells, and approximate locations of potential contaminant sites. Sites numbered on the map are identified on Table 2.

Many potential sources of contamination are regulated at the federal level, state level, or both to reduce the risk of release. When a business, facility, or property is identified as a potential contaminant source, this should not be interpreted to mean that this business, facility, or property is in violation of any local, state, or federal environmental law or regulation. What it does mean is that the potential for contamination exists due to the nature of the business, industry, or operation.

### Section 3. Susceptibility Analysis

The susceptibility of the Hillside Service Area wells to contamination was assessed on the following factors:

- physical integrity of the wells,
- hydrologic characteristics,
- land use characteristics, and potentially significant contaminant sources
- historic water quality

The susceptibility rankings are specific to a particular potential contaminant or category of contaminants. A high susceptibility rating relative to one potential contaminant does not mean that the water system is at the same risk for all other potential contaminants. The relative ranking that is derived for each well is a qualitative, screening-level step that, in many cases, uses generalized assumptions and best professional judgement. The following summaries describe the rationale for the susceptibility ranking. The Susceptibility Analysis Worksheets, Attachment A, show in detail how each well scored.

#### Well Construction

Well construction directly affects the ability of the wells to protect the aquifer from contaminants. Lower scores imply a well that can better protect the water. This portion of the susceptibility analysis relies on information from the most recent Sanitary Survey of the public water system and from individual well logs.

The last Sanitary Survey for the Hillside Service Area was conducted March 23, 2000. The system is in compliance with *Idaho Rules for Public Drinking Water Systems*. The installation report for the Finucane well doesn't include any lithologic data, and doesn't include details about the casing and surface seal, so several factors considered in the Susceptibility Analysis for the well are unknown

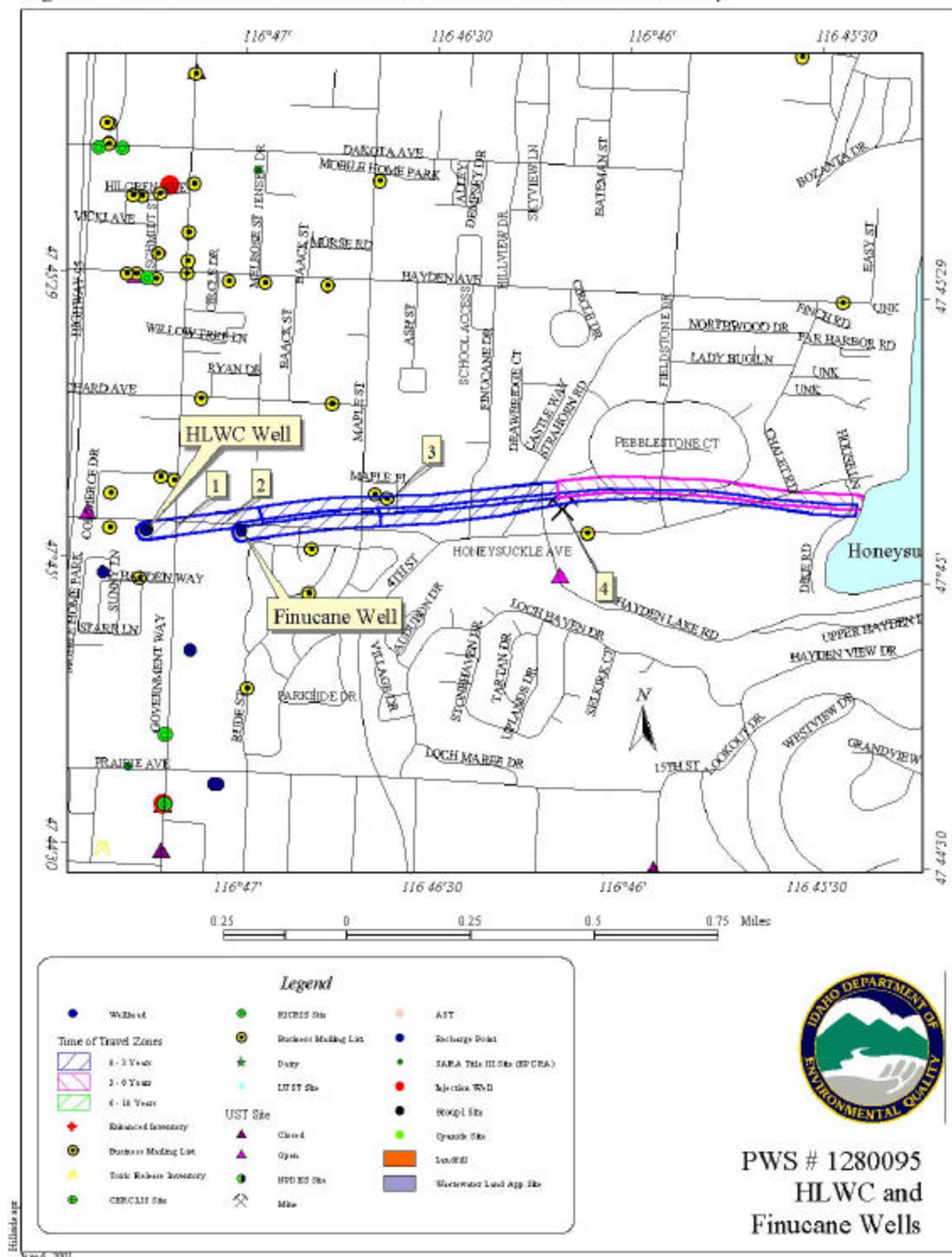
The Finucane well was drilled in 1963 to a depth of 288 feet. The 10-inch casing extends from two feet above ground to 268 feet below. The bottom 20 feet of the well is screened. The standing water level in the well is at 245 feet.

The HLWC well, drilled in 1977, is 350 feet deep. The 16-inch steel casing, with a wall thickness of 0.375 inches, extends the depth of the well. A stainless steel well screen with graduated slot sizes extends from 315 feet to the bottom of the well. A puddling clay surface seal was installed to a depth of about 30 feet. The seal and casing terminate in sand and gravel strata. The static water level in the well is 273 feet.

**Table 1. Selected Construction Characteristics of Hillside Service Area Wells.**

Well	Total Depth (ft.)	Depth of Surface Seal (ft)	Depth of Casing (ft)	Well Screen Depth Range (ft)	Static Water Level (ft)
Finucane	288	Unknown	268	268/288	245
HLWC	350	30	350	315/350	273

Figure 2. Hillside Service Area Delineation and Potential Contaminant Inventory.



## Hydrologic Sensitivity

Hydrologic sensitivity scores reflect natural geologic conditions at the well sites and in the recharge zones. Information for this part of the analysis is derived from the well log and from the soils drainage classification for the well recharge zone.

Both of the Hillside Service Area wells scored 6 points out of 6 points possible in this portion of the Susceptibility Analysis. Soils in the well recharge zones are generally well drained. Soils that drain quickly are deemed less protective of ground water than slowly draining soils. . Sand, gravel and cobbles fill the soil strata between the topsoil and the water table. . There is not a significant clay layer to retard the vertical transport of contaminants. The depth to ground water in the wells is less than 300 feet, reducing the opportunity for potential contaminant attenuation through adsorption and other mechanisms.

## Potential Contaminant Sources and Land Use

The HLWC Well is located in a commercial area near the intersection of Government Way and Honeysuckle Avenue in Hayden Lake. The Finucane Well is in a residential area south of Honeysuckle Avenue. Land use in the Hillside Service Area delineations is mostly urban residential. A municipal sewer serves homes in the recharge area. Sewer lines cross the 0-to-3-year time of travel zones delineated for the wells.

Table 2, *Hillside Service Area Potential Contaminant Inventory* summarizes information about the sites numbered on the Delineation and Potential Contaminant Inventory map, Figure 2. The borrow pit on the edge of the delineation zone produces sand and gravel. Potential hazards to ground water originating at the site would most likely be associated with illegal dumping.

**Table 2. Hillside Service Area Potential Contaminant Inventory.**

MAP ID NUMBER	SITE DESCRIPTION	SOURCE OF INFORMATION	POTENTIAL CONTAMINANTS <sup>1</sup>
1	Government Way	County Maps	IOC, SOC VOC,
2	Sewer Lines	DEQ Files	IOC, Microbial
3	General Contractor	Business Mailing List	IOC, SOC, Microbial
4	Borrow Pit	Mines Database	?

<sup>1</sup> IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical

## Historic Water Quality

The primary water quality problem for Hillside Service Area has been microbial contamination in the reservoirs and distribution system. The system tests monthly for total Coliform bacteria. Bacteria were present in samples analyzed in September and November 1993, April 1994, August 1995, April 1996; December 1997, June and July 1998, and August 2000. The March 2000 Sanitary Survey recommended:

- Installation of screened air gaps between pump discharge and waste pipes for both wells.
- Sealing cracks in the reservoir roofs, and cleaning the top of the Middle Reservoir.
- Diverting storm runoff from the reservoirs.
- Screening the Packsaddle Reservoir overflow.
- Adopting a cross connection control plan.

The work was completed in the summer of 2000.

Nitrate concentrations have ranged between undetectable levels and 1.4 mg/l in samples from the HLWC well since annual testing began in 1982. The Maximum Contaminant Level (MCL) for nitrate is 10 mg/l. In the Finucane well, nitrate concentrations have ranged from 0 to 0.195 mg/l. Sampling results for the Finucane well are not on file for the years prior to 1994. Radiological contaminants at levels below the MCL have been present since testing began in 1984. No other regulated contaminants are persistently present in samples from the two wells.

## Final Susceptibility Ranking

The Hillside Service Area wells ranked moderately susceptible to all classes of regulated contaminants, mostly because of naturally occurring geological factors associated with the Rathdrum Prairie Aquifer. Cumulative scores for the wells are summarized on Table 3. A complete susceptibility analysis worksheet for each well can be found in Attachment A.

The final scores for the susceptibility analysis were determined using the following formulas:

- 1) VOC/SOC/IOC Final Score = Hydrologic Sensitivity + System Construction + (Potential Contaminant/Land Use x 0.2)
- 2) Microbial Final Score = Hydrologic Sensitivity + System Construction + (Potential Contaminant/Land Use x 0.375)

The final ranking categories are as follows:

- 0 - 5 Low Susceptibility
- 6 - 12 Moderate Susceptibility
- > 13 High Susceptibility

**Table 3. Summary of Hillside Service Area Susceptibility Evaluation**

Susceptibility Scores						
Well	System Construction	Hydrologic Sensitivity	Contaminant Inventory			
			IOC	VOC	SOC	Microbial
HLWC	3	6	11	8	8	6
Finucane	4	6	5	2	2	4
Final Susceptibility Ranking						
	IOC	VOC	SOC	Microbial		
HLWC	Moderate	Moderate	Moderate	Moderate		
Finucane	Moderate	Moderate	Moderate	Moderate		

IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical

HIGH\* - Indicates source automatically scored as high susceptibility due to presence of bacteria or a VOC, SOC or an IOC above the maximum contaminant level in the tested drinking water

## Section 4. Options for Source Water Protection

The susceptibility assessment should be used as a basis for determining appropriate new protection measures or re-evaluating existing protection efforts. No matter what the susceptibility ranking a source receives, protection is always important. Whether the source is currently located in a “pristine” area or an area with numerous industrial and/or agricultural land uses that require education and surveillance, the way to ensure good water quality in the future is to act now to protect valuable water supply resources.

An effective source water protection program is tailored to the particular local source water protection area. The state and local health districts have instituted enhanced protection of the ground water in the Rathdrum Prairie Aquifer because of its high use and uniquely pristine water quality. The protections are generally aquifer wide and are not aimed at zones of contribution to a specific well or water system. *The Spokane Valley-Rathdrum Prairie Atlas*, sent to water systems on the prairie when they were invited to perform an enhanced contaminant inventory, describes some of the regional protection measures.

The 186 public water systems in Idaho that draw water from the Rathdrum Prairie Aquifer should consider forming a regional group to represent their interests before state, county and municipal governing bodies when regulatory tools like zoning overlays, or enactment of building codes are the most appropriate ground water protection measures. These types of measures could be used to protect the capture zones of a specific system or group of wells that could be put at risk from local land use changes. Partnerships with state and local agencies and industry groups should also be established. For instance, source water protection activities for agriculture should be coordinated with the Idaho State Department of Agriculture, local Soil Conservation District, and the Natural Resources Conservation Service.

In its own jurisdiction, Hillside Service Area should promote its cross connection control program. Visits to businesses in the recharge zones for the wells to encourage best management practices for preservation of ground water quality, and presentations before civic groups are examples of public education activities the water district should consider. Water users can be invited to participate in voluntary ground water protection activities like household hazardous materials collection days. Local participation in development of long term management and contingency plans for the recharge zone should be encouraged.

Due to the time involved with the movement of ground water, wellhead protection activities should be aimed at long-term management strategies even though these strategies may not yield results in the near term.

## **Assistance**

Public water suppliers and users may call the following IDEQ offices with questions about this assessment and to request assistance with developing and implementing a local protection plan. In addition, draft protection plans may be submitted to the IDEQ office for preliminary review and comments.

Coeur d'Alene Regional DEQ Office     (208) 769-1422

State IDEQ Office                                 (208) 373-0502

Website: <http://www.deq.state.id.us>

Water suppliers serving fewer than 10,000 persons may contact John Bokor, Idaho Rural Water Association, at (208) 343-7001 for assistance with wellhead protection strategies.

## References Cited

Great Lakes-Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers, 1997. "Recommended Standards for Water Works."

Idaho Department of Agriculture, 1998. Unpublished Data.

Idaho Division of Environmental Quality, 1994. Ground Water and Soils Reconnaissance of the Lower Payette Area, Payette County, Idaho. Ground Water Quality Technical Report No. 5. Idaho Division of Environmental Quality. December 1994.

Idaho Division of Environmental Quality, 1996. Lower Payette River Agriculture Irrigation Water Return Study and Ground Water Evaluation, Payette County, Idaho. Water Quality Status Report No. 115.

Idaho Department of Environmental Quality, 1997. Design Standards for Public Drinking Water Systems. IDAPA 58.01.08.550.01.

Idaho Department of Environmental Quality, 2000. *The Spokane Valley-Rathdrum Prairie Aquifer Atlas*.

Idaho Department of Environmental Quality, 2000. City of Fruitland Wellhead Viability Project 319 Grant Final Report July 2000.

Idaho Department of Water Resources, 1993. Administrative Rules of the Idaho Water Resource Board: Well Construction Standards Rules. IDAPA 37.03.09.

Natural Resource Conservation Service, 1991. Idaho Snake-Payette Rivers Hydrologic Unit Plan of Work. March 1991.

United States Geological Survey, 1986. Quality of Ground Water in the Payette River Basin, Idaho. United States Geological Survey. Water Resources Investigation Report 86-4013.

University of Idaho. 1986. Ground Water Resources in a Portion of Payette County, Idaho. Idaho Water Resources Research Institute. University of Idaho. Moscow, Idaho. April 1986.

## Attachment A

### Hillside Service Area Susceptibility Analysis Worksheets

**Ground Water Susceptibility**

Public Water System Name : **HILLSIDE SERVICE AREA**  
Public Water System Number : **1280095**

Source: **HLWC WELL**  
6/7/01 9:39:02 AM

<b>1. System Construction</b>		<b>SCORE</b>			
Drill Date	10/27/77				
Driller Log Available	YES				
Sanitary Survey (if yes, indicate date of last survey)	YES 2000				
Well meets IDWR construction standards	YES	0			
Wellhead and surface seal maintained	YES	0			
Casing and annular seal extend to low permeability unit	NO	2			
Highest production 100 feet below static water level	NO	1			
Well located outside the 100 year flood plain	YES	0			
<b>Total System Construction Score</b>		<b>3</b>			
<b>2. Hydrologic Sensitivity</b>					
Soils are poorly to moderately drained	NO	2			
Vadose zone composed of gravel, fractured rock or unknown	YES	1			
Depth to first water > 300 feet	NO	1			
Aquitard present with > 50 feet cumulative thickness	NO	2			
<b>Total Hydrologic Score</b>		<b>6</b>			
<b>3. Potential Contaminant / Land Use - ZONE 1A (Sanitary Setback)</b>		IOC	VOC	SOC	Microbial
		Score	Score	Score	Score
Land Use Zone 1A	URBAN/COMMERCIAL	2	2	2	2
Farm chemical use high	NO	0	0	0	
IOC, VOC, SOC, or Microbial sources in Zone 1A	NO	NO	NO	NO	NO
<b>Total Potential Contaminant Source/Land Use Score - Zone 1A</b>		<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>
<b>Potential Contaminant / Land Use - ZONE 1B ( 3 YR. TOT)</b>					
Contaminant sources present (Number of Sources)	YES	3	2	2	2
(Score = # Sources X 2 ) 8 Points Maximum		6	4	4	4
Sources of Class II or III leacheable contaminants or Microbials	YES	3	2	2	
4 Points Maximum		3	2	2	
Zone 1B contains or intercepts a Group 1 Area	NO	0	0	0	0
Land use Zone 1B	Less Than 25% Agricultural Land	0	0	0	0
<b>Total Potential Contaminant Source / Land Use Score - Zone 1B</b>		<b>9</b>	<b>6</b>	<b>6</b>	<b>4</b>
<b>Potential Contaminant / Land Use - ZONE II (6 YR. TOT)</b>					
Contaminant Sources Present	YES	0	0	0	
Sources of Class II or III leacheable contaminants or Microbials	NO	0	0	0	
Land Use Zone II	Less than 25% Agricultural Land	0	0	0	
<b>Potential Contaminant Source / Land Use Score - Zone II</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Potential Contaminant / Land Use - ZONE III (10 YR. TOT)</b>					
Contaminant Source Present	NO	0	0	0	
Sources of Class II or III leacheable contaminants or Microbials	NO	0	0	0	
Is there irrigated agricultural lands that occupy > 50% of Zone	NO	0	0	0	
<b>Total Potential Contaminant Source / Land Use Score - Zone III</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Cumulative Potential Contaminant / Land Use Score</b>		<b>11</b>	<b>8</b>	<b>8</b>	<b>6</b>
<b>4. Final Susceptibility Source Score</b>		<b>11</b>	<b>11</b>	<b>11</b>	<b>11</b>
<b>5. Final Well Ranking</b>		Moderate	Moderate	Moderate	Moderate

**Ground Water Susceptibility**

Public Water System Name : **HILLSIDE SERVICE AREA**  
 Public Water System Number : **1280095**

Source: **FINUCANE WELL**  
 6/7/01 9:38:44 AM

<b>1. System Construction</b>		<b>SCORE</b>			
Drill Date	5/14/63				
Driller Log Available	YES				
Sanitary Survey (if yes, indicate date of last survey)	YES 2000				
Well meets IDWR construction standards	UNKNOWN	1			
Wellhead and surface seal maintained	YES	0			
Casing and annular seal extend to low permeability unit	UNKNOWN	2			
Highest production 100 feet below static water level	NO	1			
Well located outside the 100 year flood plain	YES	0			
<b>Total System Construction Score</b>		<b>4</b>			
<b>2. Hydrologic Sensitivity</b>					
Soils are poorly to moderately drained	NO	2			
Vadose zone composed of gravel, fractured rock or unknown	UNKNOWN	1			
Depth to first water > 300 feet	NO	1			
Aquitard present with > 50 feet cumulative thickness	UNKNOWN	2			
<b>Total Hydrologic Score</b>		<b>6</b>			
		IOC	VOC	SOC	Microbial
<b>3. Potential Contaminant / Land Use - ZONE 1A (Sanitary Setback)</b>		Score	Score	Score	Score
Land Use Zone 1A	URBAN/COMMERCIAL	2	2	2	2
Farm chemical use high	NO	0	0	0	
IOC, VOC, SOC, or Microbial sources in Zone 1A	NO	NO	NO	NO	NO
<b>Total Potential Contaminant Source/Land Use Score - Zone 1A</b>		<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>
<b>Potential Contaminant / Land Use - ZONE 1B ( 3 YR. TOT)</b>					
Contaminant sources present (Number of Sources)	YES	1	0	0	1
(Score = # Sources X 2 ) 8 Points Maximum		2	0	0	2
Sources of Class II or III leacheable contaminants or Microbials	YES	1	0	0	
4 Points Maximum		1	0	0	
Zone 1B contains or intercepts a Group 1 Area	NO	0	0	0	0
Land use Zone 1B	Less Than 25% Agricultural Land	0	0	0	0
<b>Total Potential Contaminant Source / Land Use Score - Zone 1B</b>		<b>3</b>	<b>0</b>	<b>0</b>	<b>2</b>
<b>Potential Contaminant / Land Use - ZONE II (6 YR. TOT)</b>					
Contaminant Sources Present	NO	0	0	0	
Sources of Class II or III leacheable contaminants or Microbials	NO	0	0	0	
Land Use Zone II	Less than 25% Agricultural Land	0	0	0	
<b>Potential Contaminant Source / Land Use Score - Zone II</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Potential Contaminant / Land Use - ZONE III (10 YR. TOT)</b>					
Contaminant Source Present	NO	0	0	0	
Sources of Class II or III leacheable contaminants or Microbials	NO	0	0	0	
Is there irrigated agricultural lands that occupy > 50% of Zone	NO	0	0	0	
<b>Total Potential Contaminant Source / Land Use Score - Zone III</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Cumulative Potential Contaminant / Land Use Score</b>		<b>5</b>	<b>2</b>	<b>2</b>	<b>4</b>
<b>4. Final Susceptibility Source Score</b>		<b>11</b>	<b>10</b>	<b>10</b>	<b>12</b>
<b>5. Final Well Ranking</b>		Moderate	Moderate	Moderate	Moderate

## POTENTIAL CONTAMINANT INVENTORY

### LIST OF ACRONYMS AND DEFINITIONS

**AST (Aboveground Storage Tanks)** – Sites with aboveground storage tanks.

**Business Mailing List** – This list contains potential contaminant sites identified through a yellow pages database search of standard industry codes (SIC).

**CERCLIS** – This includes sites considered for listing under the **Comprehensive Environmental Response Compensation and Liability Act (CERCLA)**. CERCLA, more commonly known as Superfund is designed to clean up hazardous waste sites that are on the national priority list (NPL).

**Cyanide Site** – DEQ permitted and known historical sites/facilities using cyanide.

**Dairy** – Sites included in the primary contaminant source inventory represent those facilities regulated by Idaho State Department of Agriculture (ISDA) and may range from a few head to several thousand head of milking cows.

**Deep Injection Well** – Injection wells regulated under the Idaho Department of Water Resources generally for the disposal of stormwater runoff or agricultural field drainage.

**Enhanced Inventory** – Enhanced inventory locations are potential contaminant source sites added by the water system. These can include new sites not captured during the primary contaminant inventory, or corrected locations for sites not properly located during the primary contaminant inventory. Enhanced inventory sites can also include miscellaneous sites added by the Idaho Department of Environmental Quality (DEQ) during the primary contaminant inventory.

**Floodplain** – This is a coverage of the 100year floodplains.

**Group 1 Sites** – These are sites that show elevated levels of contaminants and are not within the priority one areas.

**Inorganic Priority Area** – Priority one areas where greater than 25% of the wells/springs show constituents higher than primary standards or other health standards.

**Landfill** – Areas of open and closed municipal and non-municipal landfills.

**LUST (Leaking Underground Storage Tank)** – Potential contaminant source sites associated with leaking underground storage tanks as regulated under RCRA.

**Mines and Quarries** – Mines and quarries permitted through the Idaho Department of Lands.)

**Nitrate Priority Area** – Area where greater than 25% of wells/springs show nitrate values above 5mg/l.

**NPDES (National Pollutant Discharge Elimination System)** – Sites with NPDES permits. The Clean Water Act requires that any discharge of a pollutant to waters of the United States from a point source must be authorized by an NPDES permit.

**Organic Priority Areas** – These are any areas where greater than 25 % of wells/springs show levels greater than 1% of the primary standard or other health standards.

**Recharge Point** – This includes active, proposed, and possible recharge sites on the Snake River Plain.

**RICRIS** – Site regulated under **Resource Conservation Recovery Act (RCRA)**. RCRA is commonly associated with the cradle to grave management approach for generation, storage, and disposal of hazardous wastes.

**SARA Tier II (Superfund Amendments and Reauthorization Act Tier II Facilities)** – These sites store certain types and amounts of hazardous materials and must be identified under the Community Right to Know Act.

**Toxic Release Inventory (TRI)** – The toxic release inventory list was developed as part of the Emergency Planning and Community Right to Know (Community Right to Know) Act passed in 1986. The Community Right to Know Act requires the reporting of any release of a chemical found on the TRI list.

**UST (Underground Storage Tank)** – Potential contaminant source sites associated with underground storage tanks regulated as regulated under RCRA.

**Wastewater Land Applications Sites** – These are areas where the land application of municipal or industrial wastewater is permitted by DEQ.

**Wellheads** – These are drinking water well locations regulated under the Safe Drinking Water Act. They are not treated as potential contaminant sources.

**NOTE:** Many of the potential contaminant sources were located using a geocoding program where mailing addresses are used to locate a facility. Field verification of potential contaminant sources is an important element of an enhanced inventory.

Where possible, a list of potential contaminant sites unable to be located with geocoding will be provided to water systems to determine if the potential contaminant sources are located within the source water assessment area.